

CLAIMS

What is claimed is:

1.

A rotary float, comprising:

an elongated tubular arm having a drive shaft rotatably mounted therethrough and projecting from opposing forward and rearward ends thereof;

a coupler on a rearward end of the drive shaft, for selectively and removably coupling a drive unit to the drive shaft, to thereby selectively rotate the drive shaft within the arm;

a collet shaft connected at a rearward end to a forward end of the drive shaft, for rotation therewith;

a swivel device interconnecting the collet shaft and drive shaft, operable to transmit rotational force of the drive shaft to the collet shaft, while permitting pivotal movement of the collet shaft about the swivel device; and

a bit mounted on a forward end of the collet shaft.

2.

The rotary float of claim 1, further comprising a handle mounted on the rearward end of the arm.

3.

The rotary float of claim 2, wherein said handle is formed in the shape of a pistol grip.

4.

The rotary float of claim 3, wherein said swivel is a helical coil coupler.

5.

The rotary float of claim 4, wherein said collet shaft is rotatably mounted through an extension tube and projects from a forward end of the extension tube, further comprising a knuckle joint interconnecting the extension tube with the tubular arm, said knuckle joint permitting pivotal movement of the extension tube about the knuckle joint, and wherein said swivel is housed within said knuckle joint.

6.

The rotary float of claim 5, wherein said knuckle joint includes:

- a hollow spherical ball connected to the forward end of the tubular arm and having a truncated forward end through which the swivel is operably journaled;

- an enlarged bell formed on a rearward end of the extension tube, said bell having a spherical-shaped inner surface for slidably and rotatably receiving the ball;

- a collar removably secured to the bell and having a rearward annular lip extending radially inwardly to a diameter less than that of an outer diameter of the ball, to thereby secure the ball within the bell for rotatable movement therein.

7.

The rotary float of claim 6, further comprising an elongated tubular cap removably secured over the bit and extension tube, said cap having forward and rearward ends and an opening formed in a side proximal the forward end, the opening having dimensions to reveal a sufficient portion of the bit to permit the bit to contact and engage a surface adjacent the extension tube.

8.

The rotary float of claim 7, further comprising means for removably securing said cap on said extension tube, said means for removably securing the cap adapted to permit selective rotation of the cap about a longitudinal axis of the extension tube.

9.

The rotary float of claim 8, wherein said means for removably securing the cap includes means for frictionally securing said cap in position on said extension tube.

10.

The rotary float of claim 9, wherein said means for frictionally securing said cap includes a resilient, compressible O-ring mounted around a circumference of the extension tube, the O-ring having an overall outer diameter greater than an inner diameter of the cap.

11.

The rotary float of claim 1, wherein said swivel is a helical coil coupler.

12.

The rotary float of claim 1, wherein said collet shaft is rotatably mounted through an extension tube and projects from a forward end of the extension tube, further comprising a knuckle joint interconnecting the extension tube with the tubular arm, said knuckle joint permitting pivotal movement of the extension tube about the knuckle joint, and wherein said swivel is housed within said knuckle joint.

13.

The rotary float of claim 12, wherein said knuckle joint includes:

- a hollow spherical ball connected to the forward end of the tubular arm and having a truncated forward end through which the swivel is operably journaled;
- an enlarged bell formed on a rearward end of the extension tube, said bell having a spherical-shaped inner surface for slidably and rotatably receiving the ball;
- a collar removably secured to the bell and having a rearward annular lip extending radially inwardly to a diameter less than that of an outer diameter of the ball, to thereby secure the ball within the bell for rotatable movement therein.

14.

The rotary float of claim 12, further comprising an elongated tubular cap removably secured over the bit and extension tube, said cap having forward and

rearward ends and an opening formed in a side proximal the forward end, the opening having dimensions to reveal a sufficient portion of the bit to permit the bit to contact and engage a surface adjacent the extension tube.

15.

The rotary float of claim 14, further comprising means for removably securing said cap on said extension tube, said means for removably securing the cap adapted to permit selective rotation of the cap about a longitudinal axis of the extension tube.

16.

The rotary float of claim 15, wherein said means for removably securing the cap includes means for frictionally securing said cap in position on said extension tube.

17.

The rotary float of claim 16, wherein said means for frictionally securing said cap includes a resilient, compressible O-ring mounted around a circumference of the extension tube, the O-ring having an overall outer diameter greater than an inner diameter of the cap.